



This is an official
DHEC Health Advisory

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00369-DAD-09-13-2014-EV-D68

Severe Respiratory Illness Associated with Enterovirus D68 – Multiple States, 2014

Summary

The Centers for Disease Control and Prevention (CDC) is working closely with hospitals and local and state health departments to investigate recent increases in hospitalizations of patients with severe respiratory illness. Enterovirus D68 (EV-D68) has been detected in specimens from children with severe illness in Missouri and Illinois. Investigations into suspected clusters in other jurisdictions are ongoing. The purpose of this health advisory is to provide awareness of EV-D68 as a possible cause of acute unexplained respiratory illness, and to provide guidance to healthcare providers.

Background

Enteroviruses are very common viruses. There are more than 100 types of enteroviruses. It is estimated that 10 to 15 million enterovirus infections occur in the United States each year. Most enterovirus infections in the U.S. occur seasonally during the summer and fall, and outbreaks tend to occur in several-year cycles. Enteroviruses can be spread by contact with feces or respiratory secretions of an infected person, introduction of the virus onto a mucous membrane after contact with a contaminated surface, or by the consumption of contaminated water. Although many enteroviruses are associated with clinical symptoms including mild upper respiratory illness, febrile rash illness, or neurologic illness (such as aseptic meningitis and encephalitis), EV-D68 has almost exclusively been associated with respiratory disease; however the full spectrum of EV-D68 illness still remains unclear.

In August of 2014, the CDC received notification from pediatric hospitals in Missouri and Illinois of an increase (relative to the same period in the previous years) in patients hospitalized with severe respiratory illness. EV-68 was identified in 19 of 22 specimens from Missouri and 11 of 14 specimens from Illinois. Since these initial reports, admissions for severe respiratory illness have continued at both facilities at rates higher than expected for this time of year. Investigations into suspected clusters in other jurisdictions are ongoing.

Many infections will be mild and self-limited, requiring only symptomatic treatment. Some people with severe respiratory illness caused by EV-D68 may need to be hospitalized and receive intensive supportive therapy. No data is currently available regarding the overall burden of morbidity and mortality from EV-D68 in the U.S.

EV-D68 has been described in association with new-onset wheezing, asthma exacerbation, and severe respiratory illness requiring hospitalization in those with or without history of underlying respiratory illness. This information was collected primarily from hospitalized cases. A majority of the cases

described in recent reports have been in the pediatric population ranging from 6 weeks to 16 years of age.

There are currently no vaccinations or specific anti-viral medications available for EV-D68, and clinical care is supportive.

Testing and Guidance for Healthcare Professionals

Available commercial, multi-pathogen detection systems can detect enteroviruses, and are approved by the Food and Drug Administration for use in clinical diagnosis. However, these systems use broadly reactive primers that amplify RNA from either human rhinoviruses (HRVs) or enteroviruses, and results are reported as "entero-rhinovirus" or "human rhinovirus/enterovirus". Most hospitals are not able to perform enterovirus typing to identify specific enterovirus.

Clinicians and facilities are advised the following:

- Providers should consider EV-D68 as a possible cause of acute unexplained severe respiratory illness and should report suspected cluster or outbreaks of **unexplained severe respiratory illness** to your regional DHEC office.
- Facilities are encouraged to test for enteroviruses if they are experiencing higher than expected rates of patients hospitalized with **severe respiratory illness**. Higher rates of confirmed enterovirus results should be reported to the regional DHEC office. For hospitals with increased enterovirus respiratory illness compared to the same time of year in previous years, DHEC can facilitate submission of specimens to the South Carolina Bureau of Laboratories (BOL) to be forwarded to CDC for EV-D68 testing. Preference is for specimens to be submitted for the most severe cases with a compatible clinical course for EV-D68.
- Facilities with a higher than expected rate of hospitalized patients with **severe respiratory illness that do not have** the capacity to test for enteroviruses should contact the regional DHEC office. Specimens can be submitted to the state BOL to test for enteroviruses. If an enterovirus is identified and EV-D68 cannot be ruled out by BOL, testing will then be performed for EV-D68 by CDC.
- A CDC summary data form for clusters of respiratory illness will be provided by DHEC and must be completed by the facility submitting specimens for testing.

To help reduce the risk of infection with EV-D68, healthcare professionals should recommend the following:

- Wash hands often with soap and water for 20 seconds, especially after changing diapers;
- **Droplet** precautions should be considered until there is more definitive information available;
- Avoid touching eyes, nose, and mouth with unwashed hands;
- Avoid kissing, hugging, and sharing cups or eating utensils with people who are sick;
- Disinfect frequently touched surfaces, such as toys and doorknobs, especially if someone is sick;
- Stay home when feeling sick, and obtain consultation from your health care provider.

DHEC contact information for reportable diseases and reporting requirements

Reporting of an enterovirus D68 outbreak is consistent with South Carolina Law requiring the reporting of diseases and conditions to your state or local public health department. (State Law # 44-29-10 and Regulation # 61-20) as per the DHEC 2014 List of Reportable Conditions available at:

<http://www.scdhec.gov/Library/CR-009025.pdf>

Federal HIPAA legislation allows disclosure of protected health information, without consent of the individual, to public health authorities to collect and receive such information for the purpose of preventing or controlling disease. (HIPAA 45 CFR §164.512).

Regional Public Health Offices – 2014

Mail or call reports to the Epidemiology Office in each Public Health Region.

LOW COUNTRY PUBLIC HEALTH REGION

Berkeley, Charleston, Dorchester
4050 Bridge View Drive, Suite 600
N. Charleston, SC 29405
Phone: (843) 953-0043
Fax: (843) 953-0051
Nights / Weekends: (843) 441-1091

Beaufort, Colleton, Hampton, Jasper
219 S. Lemacks Street
Walterboro, SC 29488
Phone: (843) 549-1516
Fax: (843) 549-6845
Nights / Weekends: (843) 441-1091

Allendale, Bamberg, Calhoun, Orangeburg
932 Holly Street
Holly Hill, SC 29059
Phone: (803) 300-2270
Fax: (843) 549-6845
Nights / Weekends: (843) 441-1091

MIDLANDS PUBLIC HEALTH REGION

Kershaw, Lexington, Newberry, Richland
2000 Hampton Street
Columbia, SC 29204
Phone: (803) 576-2749
Fax: (803) 576-2993
Nights / Weekends: (888) 801-1046

Chester, Fairfield, Lancaster, York
PO Box 817
1833 Pageland Highway
Lancaster, SC 29720
Phone: (803) 286-9948
Fax: (803) 286-5418
Nights / Weekends: (888) 801-1046

Aiken, Barnwell, Edgefield, Saluda
222 Beaufort Street, NE
Aiken, SC 29801
Phone: (803) 642-1618
Fax: (803) 643-8386
Nights / Weekends: (888) 801-1046

PEE DEE PUBLIC HEALTH REGION

Chesterfield, Darlington, Dillon, Florence, Marlboro, Marion
145 E. Cheves Street
Florence, SC 29506
Phone: (843) 661-4830
Fax: (843) 661-4859
Nights / Weekends: (843) 915-8845

Clarendon, Lee, Sumter
PO Box 1628
105 North Magnolia Street
Sumter, SC 29150
Phone: (803) 773-5511
Fax: (803) 775-9941
Nights/Weekends: (843) 915-8845

Georgetown, Horry, Williamsburg
1931 Industrial Park Road
Conway, SC 29526-5482
Phone: (843) 915-8804
Fax: (843) 915-6502
Nights/Weekends: (843) 915-8845

UPSTATE PUBLIC HEALTH REGION

Anderson, Oconee
220 McGee Road
Anderson, SC 29625
Phone: (864) 260-5801
Fax: (864) 260-5623
Nights / Weekends: (866) 298-4442

Abbeville, Greenwood, Laurens, McCormick
1736 S. Main Street
Greenwood, SC 29646
Phone: (864) 227-5947
Fax: (864) 953-6313
Nights / Weekends: (866) 298-4442

Cherokee, Greenville, Pickens
PO Box 2507
200 University Ridge
Greenville, SC 29602-2507
Phone: (864) 372-3133
Fax: (864) 282-4373
Nights / Weekends: (866) 298-4442

UPSTATE PUBLIC HEALTH REGION (continued)

Spartanburg, Union
PO Box 2507
200 University Ridge
Greenville, SC 29602-2507
Phone: (864) 372-3133
Fax: (864) 282-4373
Nights / Weekends: (866) 298-4442

**DHEC Bureau of Disease Control
Division of Acute Disease Epidemiology**
1751 Calhoun Street
Box 101106
Columbia, SC 29211
Phone: (803) 898-0861
Fax: (803) 898-0897
Nights / Weekends: 1-888-847-0902



www.scdhec.gov

Categories of Health Alert messages:

Health Alert	Conveys the highest level of importance; warrants immediate action or attention.
Health Advisory	Provides important information for a specific incident or situation; may not require immediate action.
Health Update	Provides updated information regarding an incident or situation; unlikely to require immediate action.
Info Service	Provides general information that is not necessarily considered to be of an emergent nature.